Remark

Applicants respectfully request reconsideration of this application as amended. Claims 22-29, 31-32 and 34-44 have been amended. Claims 1-21 have been canceled. Therefore, claims 22-48 are now presented for examination.

35 U.S.C. §112 Rejection,

The Examiner has rejected claims 28-30, 34-45 and 47 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. With respect to Claims 28-30, the Examiner asserts that the specification does not provide support for a method including the code related steps in combination with the frequency related steps. The rejection of Claims 28-30 is not understood. In the Summary at page 4, line 10, "codes may be assigned dynamically for each cell." This is described in more detail, for example, at page 8, line 15, to page 9, line 27. At page 4, line 25, "each communication system may dynamically assign a frequency or frequencies." This is described in more detail, for example at page 11, line 1, to page 11, line 27. At page 6, line 10, "preferably adjacent cells may use distinguishable frequencies **and** distinguishable codes." The combination is mentioned again at page 12, line 1, relating to the amount of separation between frequencies while also using code-division techniques with overlapping wideband signals.

Further, the Applicant kindly points the Examiner's attention to the specification, page 12, line 13 through page 13, line 1:

"Alternative Embodiments

"While preferred embodiments are disclosed herein, many variations are possible which remain within the concept and scope of the invention, and these variations would become clear to one of ordinary skill in the art after perusal of the specification, drawings and claims herein.

"For example, it would be clear to one of ordinary skill in the art, after perusal of the specification, drawings and claims herein, that other and further techniques, such as adjustable power control, cell sectoring, directional antennas, and antennae diversity, may be used to enhance a wireless communication system embodying the principles of the invention. Moreover, it would be clear to one of ordinary skill that a system also employing such other techniques would be workable, and is within the scope of the invention."

With respect to Claim 34-45, the Examiner asserts that the specification does not describe an article comprising a storage medium that stores instructions. In the prior action, Applicants explained the state of the art in 1998, however, the Examiner refers to the earliest priority date in 1991. The same statements made in the prior action regarding the state of the art in 1998 apply also to the state of the art in 1991.

The general architecture of base stations in 1991 can be seen from patent applications filed around that time. US Patent No. 5,299,198 to Kay et al., filed Dec. 6, 1990, for example, in Figure 40 shows a portion of the base station which includes RAM, DRAM, EPROM etc. as media for storing program instructions for controllers, CPUs, interfaces and DSPs (Fig. 41). US Patent No. 4,972,507 issued November 20, 1990 to Lusignan shows similar components in a base station and a user terminal. US Patent No. 4,972,455 issued November 20, 1990 to Philips et al. shows a microcomputer with

EPROM. Even Schloemer, Breeden and Chuang, relied upon by the Examiner show software based systems in which instructions are stored on some medium for execution by a processor, controller, or DSP. All of these patents are examples to illustrate that to a person of average skill in the art, it was well known to implement base stations and mobile terminals using instructions stored on a medium for execution by a processor.

The Examiner cites *Hyatt v. Boone* 47 USPQ2d 1128, 1131 (Fed. Cir. 1998) apparently for the proposition of the description requiring a limitation. This case is an interference on appeal from the Board of Patent Appeals and Interferences. The rest of the passage cited in the MPEP is as follows:" For an earlier-filed application to serve as constructive reduction to practice of the subject matter of an interference count, the applicant must describe the subject matter of the count in terms that establish that he was in possession of the later-claimed invention, including all of the elements and limitations presented in the count, at the time of the earlier filing. Although Hyatt is correct that known details need not be included in a patent specification, see *In re Eltgroth*, 419 F.2d 918, 921, 164 USPQ 221, 223 (CCPA 1970) ("This court has often observed that minutiae of descriptions or procedures perfectly obvious to one of ordinary skill in the art yet unfamiliar to laymen need not be set forth."), when an explicit limitation in an interference count is not present in the written description whose benefit is sought it must be shown that a person of ordinary skill would have understood, at the time the patent application was filed, that the description requires that limitation. As discussed in *Martin v. Mayer*, 823 F.2d 500, 505, 3 USPQ2d 1333, 1337 (Fed. Cir. 1987), "It is `not a question of whether one skilled in the art might be able to construct the patentee's device from the teachings of the disclosure . . . . Rather, it is a question whether the application

necessarily discloses that particular device.'" (quoting *Jepson v. Coleman*, 314 F.2d 533, 536, 136 USPQ 647, 649-50 (CCPA 1963)). See *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1571-72, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). It is insufficient as written description, for purposes of establishing priority of invention, to provide a specification that does not unambiguously describe all limitations of the count. See, e.g., *Wagoner v. Barger*, 463 F.2d 1377, 1380, 175 USPQ2d 85, 86-87 (CCPA 1972); *Dyer v. Field*, 386 F.2d 466, 156 USPQ 85 (CCPA 1967); *Bocciarelli v. Huffman*, 232 F.2d 647, 109 USPQ 385 (CCPA 1956).

Accordingly, known details need not be included in a patent specification. The invention of the present claims involves multiple steps of determining codes or frequencies and assigning other codes or frequencies for use in a cell. As shown by the small sampling of patents mentioned above digital electronics were available for and used in cellular communications systems at the time of filing the parent application. An apparatus to perform the process recited in the claims would be vastly more difficult to implement without digital electronics. Applicants believe that a person of average skill in the art would have understood that the present invention would be implemented using digital electronics, a common form of which, as shown in the patents cited above, involves a medium storing instructions for execution by a processor or machine. Applicants respectfully submit that, as understood by a person of average skill in the art in 1991, the parent application would necessarily be construed as disclosing such structure.

With respect to Claim 47, the Examiner is referred to page 6, line 13, "cells which are separated by an intervening cell may use the same frequency..." "Each independent

communication system may dynamically assign a frequency or frequencies to use from a limited number of frequencies, after accounting for use by other systems, similarly to the manner in which codes are dynamically assigned and reassigned from a limited number of codes (4:24)." "If a control station for a second system determines that two codes are in use closest to it, it may select a third code for use in its nearest cell, and dynamically assign codes for other cells to account for that initial assignment (4:13)."

"The control station for the second system may then assign a code to each of the cells in the second system based on the same limited set of codes and a repeated pattern such as that in figure 1 (9:4)." "Each system may dynamically assign and reassign frequencies in like manner as disclosed above for dynamic assignment and reassignment of codes (11:8)."

In other words, a control station can assign a frequency for use in its nearest cell based on the use by other systems. The control station can then assign frequencies to other cells, such as a third cell, based on the nearest cell, so that when the nearest cell and the third cell use the same frequency, they are separated by an intervening cell.

35 U.S.C. §102 Rejection,

Schloemer

The Examiner has rejected claims 22-24 under 35 U.S.C. 102 (e) as being anticipated by Schloemer, U.S. Patent No. 5,206,882 ("Schloemer"). Claims 22-24 have been clarified to explicitly recite first and second communication systems. Schloemer, is directed to interference from users at other sites of a single communications system.

There is no suggestion in Schloemer of any consideration of users at other systems. Accordingly, Claims 22-24 are believed to be allowable over the cited reference.

35 U.S.C. §102 Rejection,

Chuang et al.

The Examiner has rejected claims 31-33, 46 and 48 under 35 U.S.C. 102 (e) as being anticipated by Chuang et al., U.S. Patent No. 5,212,831 ("Chuang"). Claim 31 has been clarified to explicitly recite first and second communication systems. Chuang, is directed to interference from users at other sites of a single communications system coupled to a single C.O. 10 (Fig. 1). There is no suggestion in Chuang of any consideration of users at other systems. Accordingly, Claims 31-33, 46, and 48 are believed to be allowable over the cited reference.

35 U.S.C. §103 Rejection,

Schloemer in view of Chuang and Schmidt

The Examiner has rejected claims 25-27 under 35 U.S.C. 103 (a) as being obvious over Schloemer in view of Chuang and Schmidt, U.S. Patent No. 4,765,753 ("Schmidt"). Like the other cited references, Schmidt, is directed to interference from users at other sites of a single communications system. There is also no suggestion in Schmidt of any consideration of users at other systems. Accordingly, Claims 25-27 are also believed to be allowable over the cited reference.

Conclusion

Applicants respectfully submit that the rejections have been overcome by the amendment and remark, and that the claims as amended are now in condition for allowance. Accordingly, Applicants respectfully request the rejections be withdrawn and the claims as amended be allowed.

Invitation for a Telephone Interview

The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

Request for an Extension of Time

Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17(a) for such an extension.

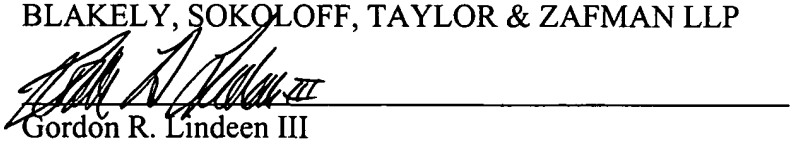
Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 2/2/14



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